

Appl. No. 10/675,315
Amdt. dated September 28, 2004
Reply to Office action of June 28, 2004

Amendments to the Specification:

Please replace the paragraph beginning on page 5, line 15 with the following amended paragraph:

As can be seen in Fig. 8, the rotor housings 21, 29 of the two compressor stages 15, 23 are placed at a sufficient distance from the walls of the coolant housing 7. In the intermediate space formed thereby, a cooling medium circulates to effect common cooling of the two compressor stages 23, 15. To this end, the coolant housing 7 has an inlet opening ~~[[67]]~~ 65 at the bottom 39 for the cooling medium and an outlet opening 67 near the top of side wall 35 for the cooling medium. The coolant fed in at opening 65 flows through the coolant housing 7 and makes its way to the exits opening 67 in an S-shaped flow path that is indicated by the dot-dashed line 69. This flow path is forced to occur via guide walls 71, 73 that extend at suitable points through the intermediate space between the rotor housing 21, 29 and the coolant housing 7. The flow path 69 first flows around rotor housing 21 of the low pressure stage 15 and then around rotor housing 29 of the high pressure stage 23, each time by a "wrap-around angle" of more than 180°, preferably nearly 360°.